Amendments to the Drawings:

[The applicant's comments below are preceded by related statements in the action dated July 26, 2007, quoted in small type.]

> ***Drawings***
>
> **The informal drawings are not of sufficient quality to permit examination. Accordingly, replacement drawing sheets in compliance with 37 CFR 1.12 l (d) are required in reply to this Office action. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.**
>
> **Applicant is given a TWO MONTH time period to submit new drawings in compliance with 37 CFR 1.81. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Failure to timely submit replacement drawing sheets will result in ABANDONMENT of the application.**
>
> **New corrected drawings in compliance with 37 CFR 1 .I21 (d) are required in this application because they are not formal. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.**

The Applicant has attached replacement sheets with the formal drawings.

REMARKS

[Each of the applicant's comments below is preceded by related statements in the action dated July 26, 2007, quoted in small type.]

> ***Claim Rejections - 35 USC § 112***
>
> **Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**
>
> **Claims 1, 27, and 31 are rejected due to the phrase "providing a consistency-maintaining food product having a gravity flowability of about 50% or more in 24 hours" as the metes and bounds of the claims are unattainable due to the parameters being undefined. For example, it is unclear at what temperature the food product is stored during the 24 hour time period, i.e. room temperature, in a heated environment, or in a cooled or frozen environment.**

Although the applicant disagrees with the examiner, claims 1, 27, and 31 have been amended.

The phrase "providing a consistency-maintaining food product having a gravity flowability" is supported at least on p. 3, lines 3-13 and p. 6, lines 22-29, of the application. This phrase is meant to be as broad as reasonably possible and includes products at room temperature, in a heated environment, and in a cooled or frozen environment. (p. 6, line 30- p. 7, line 5).

> **Claim 13 is rejected due to the phrase "under ejection conditions" as it is unclear if the ejection conditions are with respect to the substrate, the ink, or both.**

The Applicant has amended claim 13.

> **The phrase "substantially insoluble" in claim 18 is rejected, as it is a relative term, which renders the claim indefinite. The term "substantially insoluble" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear as to what is encompassed by the phrase "substantially insoluble"; it is unclear as to what degree of difference is encompassed by this phrase, if "soluble."**

Examples of media that are "substantially insoluble" in a food product are described at least on p. 7, line 31 to p. 8, line 7, of the application.

Claims 32 is rejected due to the phrase "free-flowing" as the metes and bounds of the claim is unattainable due to the parameters being undefined. For example, in the case of ice cream, it is unclear at what temperature the food product is stored, i.e. room temperature, in a heated environment, or in a cooled or frozen environment.

The phrase "free flowing" is supported at least on p. 6, lines 3-13, of the application. "Free flowing" is meant to be as broad as reasonably possible and includes products at room temperature, in a heated environment, and in a cooled or frozen environment. (p. 6, line 30- p. 7, line 5)

Claims 26, 27, 31, and 33-34 are rejected due to the phrase "an image bleed of about 10 or less" as the metes and bounds of the claims are unattainable due to the parameters being undefined with regard to the composition and density of the substrate and/or ink, as well as the temperature of the ink and substrate at the time of printing.

Claims 26, 27, and 31 have been amended to recite "a lateral image bleed of about 10% or less," which is supported at least on p. 8, lines 22-31, of the application.

The composition of the food product in claims 26 and 27 is described as a food product having a gravity-flowability. Claims 31 and 33-34 describe a consistency-maintaining edible substance having a gravity-flowability. As stated above, the temperature of the food products and edible substances can include room temperature, heated environments, and cooled or frozen environments. (p. 6, line 30- p. 7, line 5)

Claim 32 is indefinite due to the phrase "free flowing". It is unclear as to what extent, or viscosity range "free flowing" is meant to represent.' For instance, water and glue could both be viewed as "free flowing"; however they flow differently.

As stated in the reply to previous office action dated January 16, 2007, the phrase "free flowing" is supported at least on p. 6, lines 3-13, of the application. "Free flowing" is meant to be as broad as reasonably possible and includes products that have a delicate, easily damaged surface and, typically, are flowable. This can include both products that flow like water or products that flow like glue.

Claim Rejections - 35 USC § 103

Claims 1-8, 10-1 2, 15-1 6, and 19-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willcocks et al. (WO 011941 16) in view of Young (6536345).

With regards to claims 1-8, 10-12, 13, 15-1 6, and 19-36 Willcocks et al. teach a method for printing high-resolution images on an edible substrate. The printing of the image on the edible substrate is accomplished with the use of a drop on demand ink-jet printer that uses food grade ink and is capable of obtaining resolution of greater than 200 dpi. (pg. 6 line 21+) Willcocks et al. further disclose that the edible substrate may be chocolate, or ice cream (pg. 20 lines 9+) and that the image quality and resolution is dependant upon the surface chemistry of the ink and the edible substrate. (pg. 22 line 12+) "Other embodiments according to the invention which can have advantageous effect on image quality include, controlling the surface energy of the chocolate by changing the temperature of the substrate of the ink." (pg. 22 line 12+) quickly once printed, (pg. 28 line 24+) and additionally dyes may be present. (pg. 31 line 4+)

Willcocks et al, however is silent to the specific "gravity flowability" in a 24-hour period.

Young teaches an apparatus and a method of printing on edible substrates. More specifically Young teaches high resolution printing e.g. 360x260 dots per square inch (col. 6 line 1+) on edible substrates of various viscosities, such as, boiled sugar, ice cream and water (col. 6 line 6+).

Therefore with respect to claim 1, although Willcocks et al. does teach the limitation "providing a consistency-maintaining food product having a gravity flow ability of about 50% or more in 24 hours", with respect to ice cream stored at room temperature after the 24-hour elapsed time period, Willcocks et al. is silent to printing directly on a substrate which is flowable at the time of printing. However, Young not only teaches high-resolution printing on edible substrates such as ice cream, as is also taught by Willcocks et al., but Young further teaches printing on water, and boiled sugar. Therefore Young specifically teaches printing on edible substrates, where the viscosity of the edible substrate can range from solid at room temperature or highly viscous, all the way to a minimally viscous substrate, such as water. Therefore one of ordinary skill in the art at the time of the invention by the applicant would have been motivated to combine the teachings of Willcocks et al, and Young in order to provide decorated edible substrates of different viscosities thus producing an edible substrate which would be more appealing to a larger group of people, in particular children, due to its increased aesthetic appeal. Further, the

inventive aspect of the applicants invention, high resolution printing on edible substrates is taught by Willcocks et al., where the specific edible substrate which is to be printed on is merely a consumers choice which is recognized in the art as is taught by Young and evidenced by the fact that Young prints high resolution pictures on such a wide variety of edible substrates with different viscosities. One of ordinary skill would have further been motivated to adjust the specific working parameters, as addressed above, for the purpose of producing a high resolution image on an edible substrate of the consumer's choice.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Willcocks et al. and Young adjust the specific working parameters, as addressed above, for the purpose of producing a high resolution image on an edible substrate of the consumer's choice, and to further teach a method of printing which is capable of not only printing on viscous substrates but further on minimally viscous substrates due to the fact that the provision of providing an image on an edible substrate is a desirable feature, which would further enhance the substrate's overall appearance thereby further increasing sales.

Specifically regarding claim 12, Willcocks et al. the addition of a surfactant in order to affect the image quality by increasing the density or viscosity of the ink. The altering of the ink using difference components, as well as different percentages thereof would subsequently alter the viscosity of the ink.

Claim 1 has been and now recites a "process, comprising...applying a jettable media to the food product from an ink jet printer as a series of fluid drops in a predetermined pattern, the media having a viscosity *greater than* a viscosity of the food product at a temperature of the food product during application of the media." The Examiner cites Willcocks as teaching "the addition of a surfactant in order to affect the image quality by increasing the density or viscosity of the ink." The Examiner further states that "the altering of the ink using difference [sic] components, as well as different percentages thereof would subsequently alter the viscosity of the ink."

The Applicant could not find where Willcocks teaches that the addition of a surfactant increases the density or viscosity of the ink, or that the addition of different components would alter the viscosity of the ink. Willcocks does state that a surfactant can improve the compatibility of the ink with the surface of the chocolate, but it does not say that the surfactant changes the viscosity of the ink. (Willcocks, p. 29, lines 9-12)

Even if the surfactant in Willcoks did change (e.g., increase) the viscosity of the ink, nowhere does Willcocks disclose or make obvious "the media having a viscosity *greater than* a viscosity of the food product," as recited in amended claim 1. Young also fails to disclose or make obvious this feature.

Willcocks describes printing on solid substrates, such as M&M®s-type candy or other sugar shell candy, or hard candy, jelly beans, and gelatin-based gummi and soft candies. (Willcocks, p. 20, lines 7-17) The liquid ink used for such printing would have a viscosity *less than* the viscosity of the solid substrates like hard candy. Therefore, Willcocks fails to describe or make obvious "the media having a viscosity *greater than* a viscosity of the food product."

While Young generically claims to be able to print on water (col. 6, line 9) without any specific teaching, nowhere does Young describe or make obvious that the media has a viscosity *greater than* a viscosity of the food product. Young mentions using food colorants to print on edible substrates (col. 5, lines 38-44), but does not compare the viscosity of the food colorant to the viscosity of the edible substrate.

Hence, the USPTO has not met their burden of putting forth a prima facie showing of unpatentability. For at least these reasons, amended claim 1 is patentable over Willcocks and Young, alone or in combination.

With regards to claims 1-8, 10-1 2, 13, 15-1 6, and 19-36 Willcocks et al. teach a method for printing high-resolution images on an edible substrate. The printing of the image on the edible substrate is accomplished with the use of a drop on demand ink-jet printer that uses food grade ink and is capable of obtaining resolution of greater than 200 dpi. (pg. 6 line 21 +) Willcocks et al. further disclose that the edible substrate may be chocolate, or ice cream (pg. 20 lines 9+) and that the image quality and resolution is dependant upon the surface chemistry of the ink and the edible substrate. (pg. 22 line 12+) "Other embodiments according to the invention which can have advantageous effect on image quality include, controlling the surface energy of the chocolate by changing the temperature of the substrate of the ink." (pg. 22 line 12+)

With respect to claims 1, 7, 27, and 31 although Willcocks et a1 do not teach a specific drop volume, Willcocks et al, does teach the use of a drop on demand ink jet printer for producing images on edible substrates where the resolution of the image should be greater than 200 dpi, where Willcocks et al. specifically teach a resolution of up to 1200 dpi. Therefore, since the referenced printing means and resolution meet those of the instant claims, and due to the fact that resolution is a direct result of drop size, it would be expected that the drop volume would meet the limitations of the instant claims, absent any clear and convincing evidence and/or arguments to the contrary. Further the patent office does not possess the facilities to test the claimed invention and those of the reference. The Office action has set forth a prima facie case of obviousness, and thus the burden shifts to applicant to demonstrate otherwise. Thus the claimed invention is obvious over the reference and therefore it would be expected that the drop volume of the edible media would meet the limitations of the claims, absent any clear and convincing evidence or arguments to the contrary.

With respect to claim 27, Willcocks and Young, alone and in combination, fail to disclose or make obvious "the media on the food product having a lateral image bleed of about 10% or less in 30 minutes." Young does not disclose anything about the percentage of image bleed in a specified time period. Willcocks, like Young, also fails to mention anything about image bleed. For at least these reasons, claim 27 is patentable over Willcocks and Young, alone or in combination.

With respect to claim 31, Willcocks and Young, alone and in combination, also fail to disclose or make obvious a "the image defined by a predetermined series of drops having...a lateral image bleed of about 10% or less in about 10 minutes." Again, neither Willcocks nor Young mention anything about the image bleed of an image applied to a substance having a gravity-flowability. Therefore, claim 31 is also patentable over Willcocks and Young, alone or in combination.

Certain features of independent claims 1 and 27 have been deleted and are now included in new claims 37-40.

All of the dependent claims are patentable for at least similar reasons as those for the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

The Petition for Extension of Time fee in the amount of $1050 and the late submission fee of §1.17(p) in the amount of $180 are being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to deposit account 06 1050, referencing Attorney Docket No. 09991-133001.

Respectfully submitted,

Date: 1/25/8

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